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ABSTRACT

This paper focuses attention on the critical importance of zoning and housing to education. It covers the causes of undersirable housing patterns, the apparent effects of these patterns on educational achievement, and possibilities for positive action to reverse the negative effects. Although examples are drawn from Santa Clara County, the thesis applies as a model of what can happen wherever large concentrations of poor people develop. Undesirable housing patterns are caused by: (1) zoning and construction practices that tend to reinforce economic and minority segregation, (2) overt discrimination against minorities, (3) the shortage of low cost rental units and dependence on local initiative for more low cost housing, and (4) lack of overall planning in urban renewal projects. These patterns can be prevented by the expansion of low income housing distributed throughout the comminity; the adoption and enforcement of fair housing legislation; and the continual revision of zoning, housing, and subdivision regulations to further the goal of a heterogeneous community. (Author/MLF)

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HOUSING PATTERNS IN RELATION TO EDUCATIONAL ACHIEVEMENT

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PROJECT SIMU-SCHOOL

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HOUSING PATTERNS IN RELATION TO EDUCATIONAL ACHIEVEMENT

RESEARCH REPORT NUMBER FOUR

OF

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FOREWORD

Project Simu School was initiated to consider ways of improving and simplifying the process of educational facilities planning for the educational planner. The initial intent was to develop a highly sophisticated simulation capability through a national coordinating center for educational planning, but early work suggested that a single large-scale simulation procedure was not feasible and that facilities planning could not be thus separated from overall educational planning. The Simu School project accordingly decided to try to develop educational planning procedures and techniques to aid the local educational planner and/or consultant.

The approach of the present project is to consider educational planning as an integrated process in which the facility becomes an integral part of the evolving education program and the teaching-learning situation. The products or output of the project, therefore, are directed toward the total process of educational planning and the procedures and methodologies which comprise it. The final products will be applied by the local educational planning body, the educational system, or members of the community to develop a program of educational services.

The development of planning tools requires careful examination of factors which contribute to the success of efforts exerted by the school system toward equity in learning opportunities for all citizens in the community. The effect of the home environment on school achievement has long been debated.

This position paper explores the relationship between the kind of home, neighborhood and community in which students live and their achievement in the classroom. Specific emphasis is placed on economic/ethnic aspects of the neighborhood. The paper proposes that current and future problems faced by the schools which are under mandate to provide equal opportunity to all learners can be alleviated through major efforts to create neighborhoods and communities with a more balanced "mix" of housing conditions. Positive action by community planners is suggested.

It is hoped that this position paper can contribute to the effectiveness with which those who plan for the future of education in their community achieve their goals.

Lester W. Hunt, Director
Project Simu School: Santa Clara County Component

The project presented or reported herein was performed pursuant to a grant from the U.S. Office of Education, Department of Health, Education and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

ABSTRACT

It has been demonstrated that academic achievement is closely related to environment. The purpose of this paper is to show how one aspect of environment--housing--affects such achievement, and specifically how housing quality and housing patterns affect efforts to provide equal educational opportunity. Examples are drawn from Santa Clara County, but the thesis applies as a model of what can happen wherever large concentrations of poor people develop. The major contribution of the study may be to alert planners and school officials to the ways that zoning practices and housing development systems can influence achievement in school, and thus influence the rest of the student's life.

Undesirable housing patterns are caused by zoning and construction practices that tend to re-enforce economic and minority segregation; by overt discrimination against minorities; by the shortage of low cost rental units and dependence on local initiative for more low cost housing; and by lack of overall planning in urban renewal projects.

Since government (local to federal) dictates where a learner lives and must attend school, policymakers are obligated to use their power to create learning situations of maximum opportunity for all students. This means stopping and reversing trends toward increased ghettoization for the poor and for minority groups. Santa Clara County is at a stage where ghettos are growing, and are limiting educational opportunity for many children, but where the course of events can still be altered by concerted action.

In 1971, school districts in the county formed the Inter-District Planning Council (IDPC) to bring about such action, and the Council has made its position clear to the community. IDPC urges the expansion of low income housing distributed throughout the community; the adoption and enforcement of fair housing legislation by all jurisdictions in the county; and the continual revision of zoning, housing and subdivision regulations to further the goal of a heterogeneous community (because such a community provides the best educational opportunity for all children). Bicultural or multicultural neighborhoods are to be desired as a goal of land use planners.

Some progress is seen in new requirements that subdividers must obtain clearance from affected school districts as part of the application for permission to build new developments, but such steps should be consolidated as part of a uniform policy. There is need for a county-wide policy body with enforcement powers in this area. Only as this occurs can the schools hope to adequately meet the needs of the children entrusted to them.

I. INTRODUCTION

Thesis: Academic Achievement/Environment: Environment/Housing

Academic achievement is closely related to the student's environment. This is hardly a revelation. Widespread and readily recognized evidences of the plausibility of the statement are readily at hand.* The purpose of this paper is not to reaffirm something generally accepted, but rather to relate academic achievement to quality and grouping of housing. Academic achievement is closely related to environment; housing is a major factor in determining the quality of environment. As a consequence, the zoning practices and housing development systems which result in new housing patterns have the demonstrable power to affect academic achievement.

This paper will draw examples from Santa Clara County in California, but the thesis applies as a model of what can happen to equal educational opportunity wherever there are large concentrations of poor people or ethnic minorities. Its major contribution may be to alert planners and school officials to these circumstances in any area where a substantial amount of new home construction is underway.

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* Demonstrations of relationships between academic achievement and such environmental factors as socio-economic status of the parents, cultural level of the home, languages spoken in the home, aspiration level of the student, and ethnic cultural factors have been so popular among researchers as to provide a bonanza of evidence for anyone interested in studying the connection. In fact, the sheer numbers of studies, the complexity of the masses of data currently available, and the tremendous public interest in education are leading to studies that consist of reordering and new interpretations of facts previously presented, with different interpretations. An example of this is Inequality, A Reassessment of the Effect of Family and Schooling in America, by Christopher Jencks and Associates of the Center for Educational Policy Research.[1] The pessimistic message from Inequality is that schools make little difference in changing any of the major inequalities existing in American society. About the best Jencks can say for improving schools is that it might make them a more pleasant place in which to spend the hours, days and years.

  The authors of this article believe that such pessimism is not warranted and that the quantum leap of Jencks from problem to solution is to be viewed as interesting speculation only. Essentially Jencks says: (a) of all the "inequalities" among American people, income inequality is the basic source of problems; (b) "ingenious manipulations of marginal institutions like the schools" will lead only to "glacial" progress in solving this basic problem; (c) to create the necessary support for change, the poor must stop accepting economic inequality, and higher income people and their children "must begin to feel ashamed of economic inequality"; (d) within this climate, "significant changes in the machinery of income distribution would become politically feasible." (All quotations are from page 265 of Inequality.)

Santa Clara County-San Jose Metropolitan Area: A California Growth Story

Santa Clara County is a lush, formerly agricultural area enjoying a Mediterranean climate. It comprises an area of approximately 1,312 square miles running south and east from the south end of San Francisco Bay. In 1950, the county had a population of 290,547, including 46,507 students in kindergarten through grade 12. In 1970, there was a total population of 1,064,714, including 274,220 K-12 students. There was also a striking increase in enrollment in junior colleges and four-year colleges and universities located in the county. In the same period, San Jose, county seat and largest city, grew even more, proportionately: from 17 square miles and 95,280 people to 137 square miles and 437,000 people. Because San Jose presents a rather comprehensive picture of the issues to be studied, and because it has recently undergone scrutiny by organizations with diverse points of view[2,3,4] some of the Santa Clara County references in this study will focus upon San Jose.

Ethnic Information

Principal ethnic groups in the county and city are the Spanish-language* and black populations. In 1970, the former was 17.5% (State--13%**, U.S.--5%), while the much smaller black population was 1.7% (State--7%, U.S.--11%). The Spanish-language population has always outnumbered the black in Santa Clara County, probably a consequence of its agricultural antecedents. The other five Bay Area counties have figures of 11.7% and 10.6% respectively for these two populations. Because ethnic and economic considerations are closely intertwined, the effects of housing upon ethnic concentrations will also be reviewed.

Effects of Explosive Growth: "Instant" Ghettos, Potential for Environmental Disaster

The nearly fourfold population expansion in Santa Clara County created surging demands for homes, and the twenty-year burst of building created the phenomenon of a county where only about one-fifth of the existing housing units are more than twenty years old[5] and where a school building is considered "old" if it was not built in the last fifteen years.

In this process, undesirable housing patterns emerged that have had, and are continuing to have, an adverse effect upon learning opportunities for children in some neighborhood schools. Large concentrations of poor and minority people have developed in certain areas; other parts of the county have continued to become more affluent; and segregated schools result. There are "instant ghettos" in some county areas where relatively new housing has deteriorated into near slums.

Unless the housing and zoning problems are recognized and solved to some extent, Santa Clara County may become an environmental disaster area--

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* Spanish-language: the comprehensive term used to include residents of Mexican ancestry, also known as Mexican-American, Spanish-surname or Chicano.

** Estimate from California State Office of Population Research.

educationally, socially, and politically. Large metropolitan areas all over the United States stand as examples of what may develop in the expected San Francisco Bay Area-Santa Clara County megalopolis of the early twenty-first century unless forceful corrective efforts are initiated.

II. UNDESIRABLE HOUSING PATTERNS HAVE AN ADVERSE EFFECT UPON EDUCATIONAL ACHIEVEMENT

Patterns of Population and Housing Directly Affect School Districts

Largely uncontrolled housing development practices such as those of past years create striking contrasts in types and mixtures of pupils attending schools in different areas. This is the pattern: as new homes are built, neighborhood elementary schools are built to serve them, and high schools are built to serve larger areas. Attendance boundaries are drawn using the school as the approximate population center or making compromises with boundaries and capacities of neighboring schools; essentially, however, the school serves the neighborhood. If it is a neighborhood comprised of average and higher income families, the children reflect their environmental advantages in their school. If the neighborhood is mostly poor, the teachers at that school must concentrate on the educational problems connected with poverty.

Because high schools draw from larger areas, they tend to have a more heterogeneous population, but large families in high-poverty areas may counteract that tendency. Figure 1 shows that even a high school of nearly 2,000 pupils may find its boundaries restricted to a small area of highly concentrated homes. That high school, in a medium-to-high poverty area of the county, underwent three boundary reductions in the seven years following its opening in 1962. While enrollment for 1962 and 1971 was almost identical, the attendance area producing this number of students was reduced to about one-tenth of its original size.

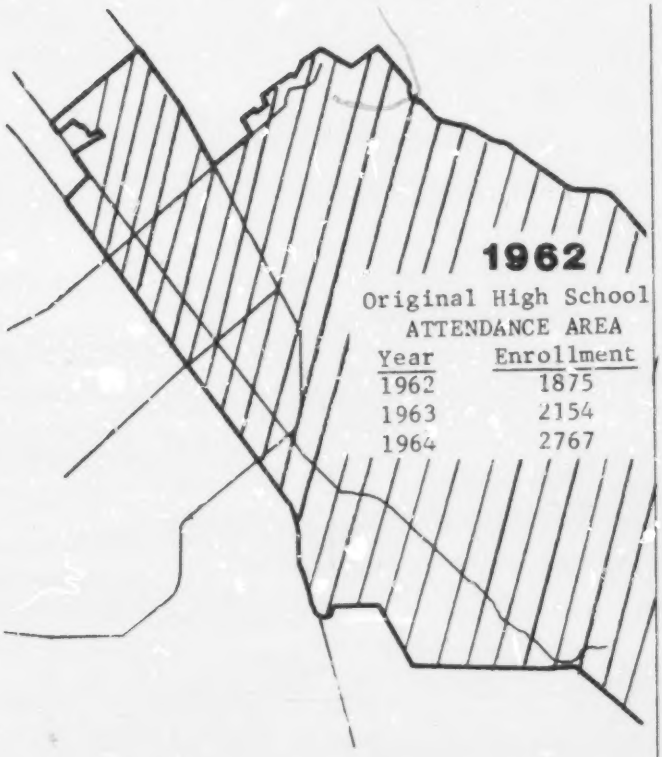
School districts, especially high school districts, are more heterogeneous in pupil socio-economic mix than a single school, but districts as large as 100 square miles--especially in the central city--may find themselves with large concentrations of poor pupils. Suburban districts and others serving more affluent areas have an entirely different clientele.

Santa Clara County Is Developing Areas with Concentrated Social Pathology Factors

In Santa Clara County, low- and moderate-income people and those in minority racial and ethnic groups tend to be concentrated in central and eastern San Jose and the older parts of Santa Clara, Sunnyvale, Mountain View and Palo Alto. The County Planning Department has documented this tendency as first noted in a 1969 publication of the Joint Cities-County Housing Element Program. After commenting on long-range movement toward economic and racial/ethnic integration, the 1969 report states: "It cannot be too heavily stressed, however, that a trend toward segregation has dominated the pattern of change since 1960."[6] The 1973 Housing Element, continuing the 1969 investigation, shows that areas with 25% or more low-income households (below $5,000) in 1966 have even more of such households, continuing the pattern noted

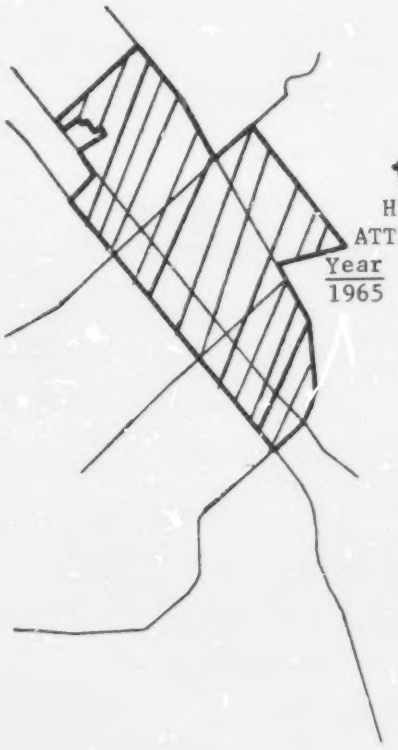
between 1966 and 1969.[7] At the other extreme, areas with 25% or more high-income households (above $20,000) have increased in the direction of greater affluence, though to a lesser extent.

FIGURE 1
SEVEN YEARS OF SHRINKING BOUNDARIES IN A HIGH DENSITY-LOW INCOME AREA HIGH SCHOOL IN SANTA CLARA COUNTY
(An Illustration of the Effect of Population Density)



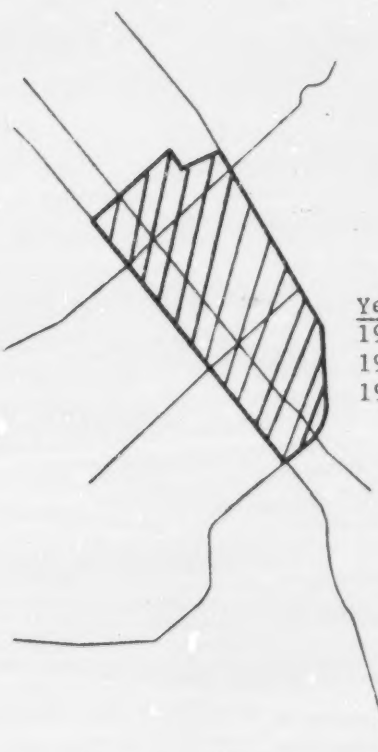
1962
Original High School
ATTENDANCE AREA

Year	Enrollment
1962	1875
1963	2154
1964	2767



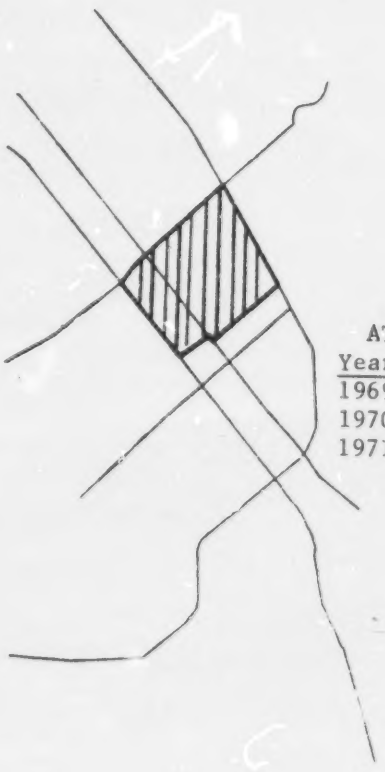
1965
High School
ATTENDANCE AREA

Year	Enrollment
1965	1978



1966
High School
ATTENDANCE AREA

Year	Enrollment
1966	1945
1967	2194
1968	2237



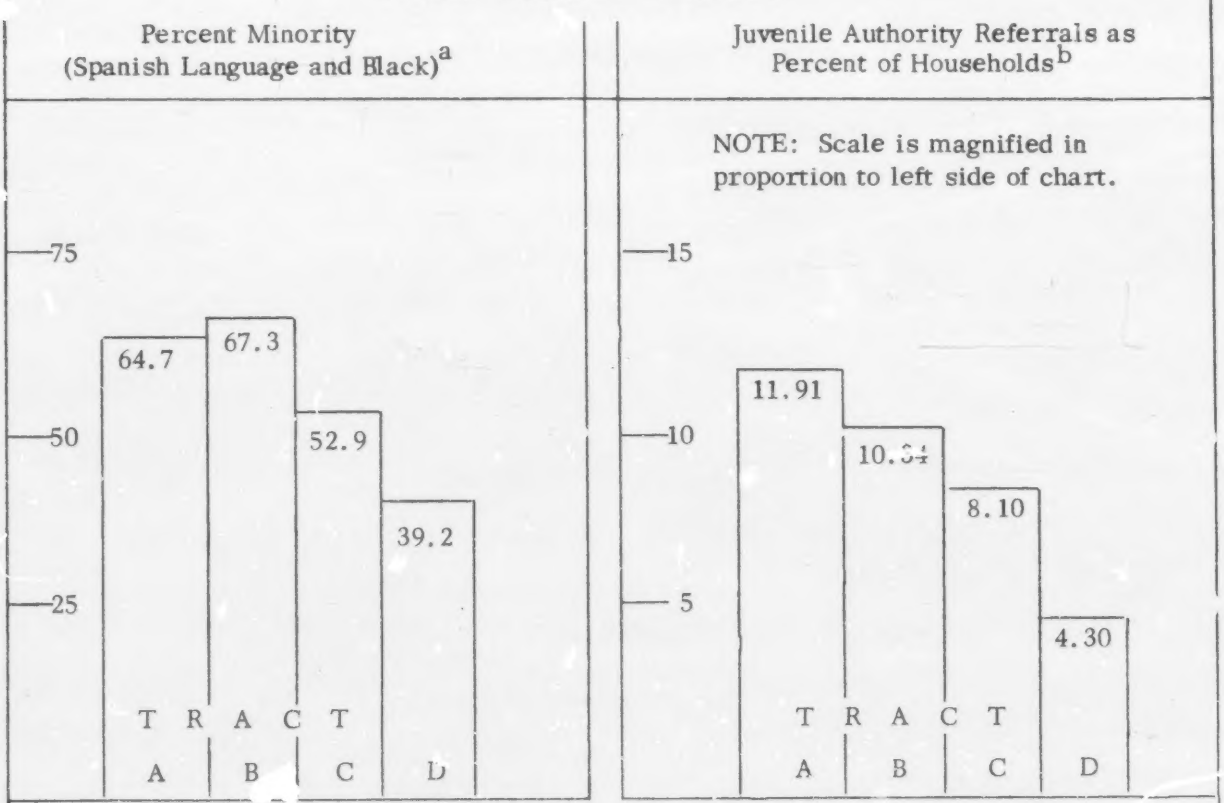
1969
High School
ATTENDANCE AREA

Year	Enrollment
1969	1727
1970	1800
1971	1874

SCALE:
1/2" = 1 mile

FIGURE 2

MINORITY AND JUVENILE REFERRAL PERCENTAGES
IN FOUR CENSUS TRACTS SERVING ONE HIGH SCHOOL



[a] From 1970 Census.

[b] From Santa Clara County Juvenile Probation Department.

TABLE 1

MINORITY TENURE IN THE 14 LOWEST AND 12 HIGHEST INCOME
1970 CENSUS TRACTS IN SANTA CLARA COUNTY

(All tracts with median household income below $6500 or above $17,000)

All Tracts, Median Household Income	Median Household Income $	Percent Population of Tracts			Percent Population of County			Number of Tracts
		Black	Span. Lang.	Tot. Min.	Black	Span. Lang.	Tot. Min.	
Below $6500	4,984	3.9	30.4	34.3	1.7	17.5	19.2	14
Above $17000	19,381	0.3	4.5	4.8				12

There are, of course, factors linked both to minority membership and poverty which would not be present were it not for the former. For example, many people in both minority groups are living in two different cultures, and the Spanish-language population faces problems complicated by dual language. These special problems, compounded by the problem of poverty, create unique educational handicaps for many Spanish-language and black children. The results are readily evident when assessed by such measures as school attendance, attrition by dropping out, and standardized test scores.

Whatever the reason for the over-concentration of poverty in the two minority groups, the fact remains that they have the lowest per capita income and live in the poorest homes, but pay the highest proportion of income for housing of any county residents. The poorest minority residents are also finding themselves increasingly impacted in a few densely populated areas of the county, notably central and east San Jose,[8] which have become substantially minority enclaves.

An example of the effect on school districts may be reviewed by study of California State Department of Education Bureau of Intergroup Relations statistics for October 1971. This report indicates that the districts serving central and east San Jose included 31% of the total K-12 student population of Santa Clara County, but 58% of all Spanish-surname pupils and 64% of all black pupils. Concentrations in individual schools within these areas ran as high as 93%, though the school with that figure was in a district where the total of these two groups was only 27% overall.

The effects of such ghettoization may be illustrated by review of the California State Testing Program scores of pupils in these schools. The positive relationship between degree of affluence on the one hand, and reading ability and arithmetic achievement on the other, has been well demonstrated by the California State Testing Program, 1970-71 report.[9] Comparisons will be made in subsequent sections of this paper with otherwise similar minority children living in a less segregated area and with majority-group children in an affluent area of the county.

Early Childhood as an Educational Factor

During the first five years of life, a child learns attitudes toward school (desirable, undesirable), toward people of other complexions (openness, suspicion), toward oneself (successful, failure), and toward reading (a key to pleasure, an unpleasant or even impossible task), to mention but a few. During these same first five years, some children learn the rudiments of numbers and reading, while children from less educationally favored environments do well to recognize a few letters or numbers absorbed under the spell of television. Some of the children learn a good deal about taking care of themselves in the context of the streets; such children are often baffled by the stress of the school upon a society of rule and order rather than the law of survival.

For most children, school from kindergarten through high school graduation will occupy only a small portion of the total hours of these thirteen years. For every hour in school, the student spends five hours in other pursuits, not all of them dedicated to homework. His environment must play a major

educational role. His parents, his home life, his brothers and sisters and other peers, and his neighborhood and community are all his teachers in a very real sense.

The Community as an Educational Factor: "Primary Environment"

The relationship of the child's home to the homes about him and their common relationship to the area known as the neighborhood (the primary environment) thus become important educational factors. The quality of the individual home is always a crucial determiner of what the child will learn. His patterns of speech, his personality, and his early formal learning will reflect what he observes in the home.

The effect upon early reading ability of homes where parents read to their children has been discussed. But suppose the home does not contain a single book, much less parents who demonstrate a love of reading? Here the child may still learn from different models if they are available. If he lives in a neighborhood where he can play and visit with children from different types of homes, he can expand his horizons. If his community offers a broad program of cultural enrichment, it can fill voids in the home environment. But if the homes and neighborhood and community are very similar, as in a ghetto, even this chance for educational enrichment is lacking.

Low Income Communities Relate to Low Educational Achievement

The community, then, is an important educational factor during all of the formative years, and socio-economic factors are primary in determining the quality of the community. Hoffmann has illustrated the effects of poverty in a community with an example using California State Testing Program results: "In Santa Clara County, the children rank among the highest in reading tests in Los Altos--a high income city. In another area, which ranks among the lowest in family income, the children rank among the lowest in school reading tests."[10] Another illustration shows that such differences in achievement cannot be attributed to differences between school systems. Two elementary schools in a large unified district were compared--one in a depressed inner city area and one in a new suburb. In the central school, median household income was about $5,200; in the suburb, $11,750. Median home values were $18,000 and $40,000 respectively. Median reading achievement levels for second grade students (midway between first and second grades) were 1.5 in the inner city school and 2.0 for the suburban school.[11]

Other research has consistently shown that in such disparate environmental circumstances, learning differences between underachievers and the rest of the pupils increase with each additional year of schooling. (According to one report,[12] "The decrease in performance from grade three to grade six was significantly greater for underachievers than for average and overachievers.") This effect is particularly true for poverty/minority pupils, as demonstrated in the United States Office of Education report, Equality in Educational Opportunity (the "Coleman Report"). With the exception of Oriental-Americans, the average minority pupils' test scores are lower at every grade level than those of the average white pupils, and at the 12th grade, "results of tests in the same verbal and non-verbal skills show that, in every case, the minority scores are farther below the majority than are the 1st graders."[13]

The relationship between poverty and educational achievement will be explored at greater length in a subsequent section.

III. CAUSES OF UNDESIRABLE HOUSING PATTERNS

Causes of undesirable housing patterns are numerous, and their effects are often compounded by that fact. Hoffmann[14] has listed the causes in the following categories: zoning and construction practices, economic segregation, minority and poverty segregation, discrimination against Spanish-language and black minorities, concentration of higher cost units, high entry costs, shortage of low cost rental units, land misuse by subdividers, dependence upon local initiative and control to build low income housing, lack of overall coordinated planning in urban renewal projects, and demolition of older homes at a faster rate than they can be replaced.

Zoning and Construction Practices Tend to Perpetuate and Amplify Existing Inequities

Zoning and construction practices of long standing have created a pattern of economically similar housing areas which has fed upon itself. Many of these conditions have an economic base, with cheaper, less desirable land going to lower-cost housing on small lots, while expensive land goes to higher-quality housing units on larger parcels. This inevitably increases earlier differences in land values and desirability. Zoning practices tend to perpetuate themselves, as cited by the Planning Policy Committee of Santa Clara County: "Common practice among cities is to zone newly annexed land to the predominant zoned density in the surrounding areas of the city."[15]

Much of the county-zoned land (not in city boundaries) is in a "holding zone" intended for annexation and rezoning by the cities before development takes place. Accordingly, land development patterns may be predicted based upon zoning. Areas zoned for 5,000-6,000 square foot lots are primarily destined for low cost single-family detached housing, while 7,000-10,000 foot lots are most practical for marginal to moderate-cost housing. Land zoned for over 10,000 square feet will not be developed for houses under a 1970 value of $24,000. Over two-thirds of all undeveloped land in Santa Clara County zoned for single-family detached housing in 1967 was zoned for lot sizes greater than 20,000 square feet. The bulk of undeveloped minimum lot size zoning, 72% of the total of 11,500 acres, was concentrated in five planning areas on the east side of the valley at this same time.[16] As a consequence, continued ghettoization is unavoidable unless zoning is drastically changed to distribute the smaller lots more evenly about the county.

Zoning Practices Result in Economic and Minority Segregation

The land zoned for small lots and low cost housing then goes to areas with disproportionate numbers of low income and minority families. The minority population and the low-income households are concentrated in roughly the same areas,[17] and because minority residents are over-represented among the poor, they bear the brunt of the economic effects. In 1970, the median gross rent of units occupied by Spanish-surname or -language and black households was about $135. Median gross rent of all other households was about $160.

Median value of units owned and occupied by the two minority groups was about $25,000 compared with a median value of $30,000 for all other households.

There is a similar disparity between proportions of income spent for rent. For example, the 1970 Census shows that almost 64% of the Spanish-language and black renter households with incomes less than $10,000 spent more than 25% of their incomes for rent. Only 30% of all other households with similar incomes spent more than 25% for rent.

Table 1 is perhaps the best demonstration of the differences between minority representation in the highest and lowest income areas of the county. The concentration in the poorest area is nearly double the Spanish-language and black proportion in the population, while their representation in the wealthy areas is only one-fourth of what would be an even distribution.

Federally Assisted Housing Does Not Relieve the Economic Concentration of Minorities

California has no state housing agency to supplement federal programs. There exist, however, both a Santa Clara County Housing Authority and a City of San Jose Housing Authority. Both authorities limit their services to the federal "Section 23" leased housing program in furnishing low-rent public housing. The combined resources of these authorities leased 2,168 of 2,690 authorized units in late 1972, maintaining a backlog of 1,000 eligible applicants.* San Jose contains nearly three-quarters of all federally assisted units in the county, with the largest numbers in planning areas with lower priced housing and concentrations of low and moderate income families. East San Jose has many of these units, while the West Valley planning areas have very few. This is a direct reflection of zoning, land cost, and the consequent availability of low cost housing. Its most direct result is further concentration of the poor.

The direct connection between minority membership and poverty has already been illustrated. Other factors related to poverty include age, educational level, and sex of head of household. In Santa Clara County, 9.4% of all families have a female head, but 39.3% of the families below the poverty level are in that situation. Minority families with female heads are even more likely to have depressed incomes.

Discrimination is a Factor in Minority Segregation

Discrimination is used here to include direct and nondeliberate effects as well as those resulting from bias, bigotry and overt actions. An example of nondeliberate discrimination is the economic stratification resulting from zoning practices. In the race to provide homes, developers built extensive subdivisions of low-priced houses on low-priced land. The

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* As of January 1973, the Secretary of Housing and Urban Development announced a moratorium on commitments to subsidize all such low to moderate income housing; so the future of the two programs is unclear.

developer was not constrained by, nor necessarily even aware of, the eventual social consequences; he simply built (mass produced) large housing tracts on land zoned for small (low cost) lots. He performed what might have been viewed as an emergency service. The social consequences may have been perceived by agencies such as protective services, welfare, and education, but the immediate goal of the developer was to sell houses.

Nondeliberate discrimination of this type may be more insidious than deliberate discrimination, but large areas of concentrated low cost housing have continuing and ever-widening consequences which are very difficult to reverse. Openly discriminatory practices, such as impeding efforts by minority people to rent or buy better housing, are reversible.

Evidences of open discrimination in sale and rental of housing in Santa Clara County have been demonstrated in a 1972 University of Santa Clara Law School study.[18] These include problems attributed to lenders, realtors, builders, apartment managers and mobile home park owners. A few agencies, private and public, have been developed to assist in identifying and correcting such discrimination where it exists. In 1972, when one agency (Mid-Peninsula Citizens for Fair Housing) surveyed 243 northern Santa Clara County apartment complexes (14-20 units each), it was found that 41 to 58 percent of the managers discriminated against blacks in response to rental inquiries from whites and blacks of similar age, income, occupation and other characteristics.[19]

Discrimination, whether unintentional, covert, or open, is largely directed toward the poor and minorities. Economic and race criteria continue to be influential in causing inequitable distributions of these people in increasingly impacted areas of the county and in the consequent concentration of their children in schools where below-average achievement is the norm.

Summary: Government--Local to Federal--Controls Where a Learner Lives and Must Attend School

This section has focused upon the causes of undesirable housing patterns. Repeatedly, the circle of cause and effect has been shown to have its spokes radiating from a supporting hub of zoning practices. The logical practice of zoning land according to the land around it; the logical practice of placing undeveloped county land in "holding zones" designed to match surrounding city zoning; the logical practice of zoning the cheapest, least desirable land into the cheapest, smallest, and least desirable lots; the logical practice of building low cost housing on lowest cost land; the logical practice of the limited federally assisted rental housing being available primarily in low cost areas; the logical practice of developers who mass-produce low cost homes in areas of lowest cost land--all of these logical practices create enclaves of the poor and the minorities.

Schools serve neighborhoods. Children go to school with children who live near them. In increasingly impacted poverty-minority areas, the schools are constituted of poverty-minority student bodies. Educational effects of the impacted community have been touched upon. Educational effects of the impacted school will now be considered.

IV. CONSIDERATIONS LINKING HOUSING ENVIRONMENT TO EDUCATIONAL ACHIEVEMENT

Environment affects learning, and housing is one important part of a person's environment. This is not to say that the value or physical condition of a home has a one-to-one relationship to school achievement; rather, concentrations of poor homes create an environment that in its socio-economic and cultural shortcomings deprives children of an important source of learning outside the home itself. A child who lives in a deprived home may still benefit educationally from association with a neighbor who lives in a home with more advantages, but if he lives in a neighborhood of depressed homes, he has no such chance.

Preschool Environment: Effects on Learning Readiness

It has been noted earlier that the period between birth and entrance to school is critical both in informal education and in preparation for formal education. This period demonstrates the teaching potential of the home environment, a ready example being the ability of children from bilingual homes to speak and understand two languages from earliest childhood. However, educational inequities exist between children because of their different environments. It has been widely hoped that remedial efforts at the preschool level can help to erase some of these inequities, but recent research tends to discourage that hope as a long-range solution.

A 1967 study tested the hypotheses that: (1) a Head Start program (preschool) experience would enable deprived children to make significant IQ gains; and (2) all deprived groups in the Head Start program would make greater IQ gains than non-Head Start control groups (the national norm groups of their age). Both hypotheses were confirmed. In the first case, after seven months in the Head Start program, an average IQ increase of 5.62 points was noted. In the second case, pupils identified as "most deprived" gained 3.34 IQ points, while those classified as "least deprived" gained 8.87 points.[20]

This study is typical of the attention currently directed toward equalization of educational opportunity for very young children from poor environments. It is significant to note that the pupils classified as "most deprived" made the least gain. In fact, the slight gain in their IQ after the seven-month program would contribute little to their expected rate of learning. So the demonstration, while positive, is hardly encouraging as a means of erasing educational disadvantage. Further, there is no evidence to indicate the lasting effect of the new higher IQ.

An evaluation of the lasting effects of Head Start experience was conducted by the Westinghouse Learning Corporation and Ohio University.[21] Findings were largely negative. A more recent and comprehensive review of available data on Head Start programs is reported by Jencks, who concluded that neither year-round nor summer Head Start programs had a significant long-term effect on cognitive growth.*

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* "When we reanalyzed this data, we found a few year-round centers in which the Head Start children's advantage over non-Head Start children persisted through first grade. Beyond first grade, however, the picture was gloomy. Overall the evidence strongly suggested that Head Start's effects on children's cognitive growth had been quite transitory."[22]

Nimnicht and Johnson have addressed the problem of an alternative approach to the kind of intervention effort underlying Head Start and similar "compensatory" programs. They suggest that schools can act to improve the child's environment, and propose two key concepts: the parents' "ability to attend" to the needs of the child and the school's "ability to respond." The former deals, for instance, with environmental improvements possible in single-parent households with many children or where the working mother is also pregnant. The latter deals with changes possible on the part of the school--first, in perceiving the unique characteristics of the poverty-minority child, and then in adjusting the school to meet these needs.[23]

Research is replete with examples and opinions of how environment affects the mental development of individuals. Studies of identical twins raised apart, siblings raised in different homes, and children taken away from their mothers have demonstrated that intelligence quotients may apparently be increased by changes in environment. This is, however, an area of great controversy, and studies follow upon studies, often in contradiction.*

Environment and Achievement: Socio-Economic Status a Key Factor

The effects of environment on educational achievement, particularly reading achievement, are readily demonstrable and thus less controversial than are the alleged effects on intelligence. Environmental aspects examined in relation to reading achievement include socio-economic status, social mobility, geographical mobility, home and parental influences, bilingualism, pupil aspiration, and mass media other than the printed word. Of these, it has been found that the most reliable predictor of reading ability is the socio-economic criterion, and this is in turn almost impossible to separate from home and parental influences, all part of the child's environment.

The universal finding that differences in achievement increase, rather than decrease, with additional schooling, has been mentioned. Deutsch[26] has found that reading scores in grade five closely correlated with socio-economic status, but not with race. He concluded that without appropriate language stimulation in early home and school life, success in school activities such as reading becomes progressively more difficult with age. Again, the importance of the home and its environs is evident.

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* The assessment of the proportionate contributions of heredity and environment to intelligence ("nature vs. nurture") has been a subject of considerable interest to psychologists and others for at least fifty years, or nearly as long as intelligence tests have been generally available. Two current estimates illustrate the differences in scholarly opinion. Jencks recognizes the imprecision of the methods of measurement, but states that his "best guess is that genotype explains about 45 percent of the variance in IQ scores, that environment explains about 35 percent, and that the correlation between genotype and environment explains the remaining 20 percent."[24] Herrnstein,[25] reviewing similar evidence and many of the same studies, believes that perhaps 80 percent of the variations in intelligence (among whites) may be attributed to heredity and the remaining 20 percent to effects of environment. He has no comparable estimate for blacks.

The importance of the home background is not restricted to students of relatively low ability. A study of boys at New York City's academic Bronx High School of Science found that those rated as achievers came from homes with higher socio-economic status and better educated fathers than did those rated as underachievers.[27]

Socio-Economic Status and Achievement

Studying the effects of a number of variables upon school achievement, particularly the relationship between socio-economic status and achievement, Campbell[28] reviewed the 216 metropolitan areas of the U.S., with special attention to 37 central city areas. He studied this relationship intensively in Chicago and Atlanta. Findings for Chicago indicated that virtually all of the explanatory power (for achievement) was in median family income; in Atlanta, a second variable with an impact separable from that of income was "crowded housing."*

A study by the California Senate of 249 school districts on an elementary achievement test resulted in similar findings (as cited by Campbell[30]): "Of overwhelming importance in explaining differences in performance were the socio-economic characteristics of the school districts. The higher the socio-economic characteristics, the higher the schools' average performance on the tests." Summarizing the California study, Campbell concluded, "The socio-economic characteristics of the neighborhoods from which the students are drawn are by far the most important cause of differences in levels of achievement. The in-school variables, those matters which are under the control of the school people, seem at best to have a marginal impact."

Before examining the interrelationships between minority membership, student aspiration, socio-economic status, and achievement, it should be noted that the connection between achievement and socio-economic status is not limited to the United States. A 1971 eight-nation study comparing socio-economic differences with aptitude and achievement included in its conclusions the statement that "a universal pattern appeared in which higher-status children scored better than lower-status children in aptitude, achievement and school grades."[31]

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* In the writers' research for this paper, Campbell's report was the only evidence directly linking crowded housing with achievement. It did not elaborate. A somewhat related study of rural housing quality in the Ozark region[29] found that: (1) quality of rural housing was significantly related to household income; and (2) level of formal education of the household head and of the wife and the type of employment of the household head were significantly related to housing quality. (Housing quality was judged by completeness of plumbing.) This study is only tangentially related to effect of housing upon educational achievement of children in such a family, but it is a reasonable assumption that the children's achievement would parallel that of their parents.

Environmental Effects Upon Minorities--Aspirations

The point has been made that the opportunity to associate with children from more favored homes is a missing educational factor in neighborhoods of impacted low cost housing. There is evidence that this associational learning factor is also important within the school student bodies, at least for minority pupils. The point is worth exploring.

In the previously cited "Coleman Report," the most comprehensive study yet conducted of differences in educational opportunity for minority pupils, one conclusion is especially pertinent: "...it appears that a pupil's achievement is strongly related to the educational backgrounds and aspirations of the other students in the school...Thus, if a white pupil from a home that is strongly and effectively supportive of education is put in a school where most pupils do not come from such homes, his achievement will be little different than if he were in a school composed of others like himself. But if a minority pupil from a home without much educational strength is put with schoolmates with strong educational background, his achievement is likely to increase."[32]

The assumption may be made that the "climate" of higher aspirations accounts in part for the improved achievement of minority pupils when they are mixed into schools where the socio-economic norm is higher. A study by De Hoyos of Mexican-American pupils revealed that students who indicated a high level of occupational and educational aspiration also indicated a high level of acculturation to certain aspects of American culture, and also reported a high socio-economic status. Those who indicated lower levels of educational and occupational aspiration also had scores indicating a lower level of acculturation and reported a lower socio-economic status.[33]

Further support linking aspiration and achievement to socio-economic status and quality of housing environment may be found in research relating level of aspiration to self perception. For example, it is known that boys' vocational aspirations are related to their school grades, curriculum, and parental occupation. The disadvantaged boy generally believes that he "can't make it," so even though he may state an ideal aspiration, he doesn't follow through with the necessary initiative, drive and effort because he believes it is not "real."[34]

Still other examples of what could be termed cultural limitations upon aspirations might be cited. Studies of the Zuni Indians indicate a characteristic cessation of educational progress when they reach a certain ability level, as though there were an invisible barrier to further progress built into their culture. Regardless of cultural backgrounds, psychological or other blocksmay impede educational progress beyond the point which a pupil and his teacher implicitly agree represents his expectation of success. This concept has recently been dramatized in the story of Jonathan Livingston Seagull,[35] who refused to accept the limits traditionally accepted by the flock. His aspirations led him to achievement beyond all normal expectation.

These findings suggest that the quality of housing and socio-economic level in a poverty neighborhood would be reflected in low student aspirations and consequent low educational success, and that this phenomenon might be especially characteristic of Mexican-American and black children.

Differential Dropout Rates, Black: Effects of Socio-Economic Level

One of the many comparisons of black and white pupils in the "Coleman Report" was in regard to high school dropout rates. A national sampling (using the 1965 Census Bureau's Current Population Survey) indicated that about 10% of the youth of ages of 16 and 17 had dropped out of school. Within this group, 17% of blacks of that age had dropped out, as compared with about 9% of white youth (white included Puerto Rican and Mexican-American minorities).[36] Where the occupation of the head of household was white collar, the dropout rates decreased to 4% black and 3% white; for all other occupations, the rates were magnified to 17% black and 13% white. This information (summarized in Table 2) indicates that the socio-economic level of the homes of the pupils has a positive correlation to chances for graduation for both black and white pupils. It also shows a greatly diminished dropout rate for pupils of either race who come from white-collar families and a greatly increased dropout rate for pupils from other than white-collar families. This latter finding is specially true for black pupils and provides further support for the need to raise aspiration levels of pupils from lower socio-economic level homes. This conclusion leads in turn to the educational value of socio-economic mix in neighborhoods.

Standardized Test Results Relating Achievement to Housing Environment

Examples of differences in test scores between schools serving affluent neighborhoods and schools serving poverty-minority neighborhoods have been cited. The official California State Testing Report for 1970-71 has also been cited as linking high poverty with low achievement and vice versa. The California report offers unusual opportunity for study of certain variables, as it includes data from virtually all of the state's nearly 1,100 districts. Reading achievement scores are reported for grades 1, 2, 3, 6, and 12. Mathematics achievement is reported for grades 6 and 12. Test data on language, spelling, and scholastic ability are also reported for grades 6 and 12. State law requires reporting of other school data such as tax rates, index of family poverty, and teachers' salaries, together with the test results. With this and other information, computer analysis of the effect of variables is possible. Results of such an analysis are reported in Table 3.

In the course of these investigations, four variables have been identified that have predictive qualities for achievement results; that is, one could predict achievement with varying degrees of accuracy by using knowledge of variables. In decreasing order of magnitude, these variables are: (1) index of family poverty; (2) percent minority; (3) pupil mobility--the number of pupils moving in and out of the schools each year; and (4) expenditures per unit of average daily attendance. This means that a closer guess could be made concerning achievement by using information on family poverty in a school district than by using percentage of minority pupils. But using (2) would permit a closer guess than would information on (3); and knowing (4) would be less helpful but better than no information at all.

This analysis provides further support for the thesis that achievement is closely related to poverty-minority status and hence to neighborhoods of impacted low cost housing.

TABLE 2

DIFFERENTIAL DROPOUT RATE (1965 CENSUS DATA) FOR BLACK AND WHITE YOUTH 16 AND 17 YEARS OLD

(by percent of age group)

TOTAL (N)	TOTAL GROUP			OCCUPATION OF HEAD OF HOUSEHOLD: White Collar			Other Than White Collar		
	BLACK	WHITE	TOTAL	BLACK	WHITE	TOTAL	BLACK	WHITE	TOTAL
Black	17			4			17		
White		9			3			13	
Total			10			3			13

Source: Equality of Educational Opportunity, Tables 17 and 19, pp. 29-30.

TABLE 3

SUMMARY OF CONTINGENCY COEFFICIENTS FOR FOUR INPUT FACTORS AND FIVE TEST SCORE FACTORS

California State Testing Program, 1970-71

Type of district and test variable	Index of family poverty	Percent minority	Pupil mobility: Grades one through eight	Pupil mobility: Grades nine through twelve	Expenditure per unit of a.d.a
Unified districts:					
Grade 3 reading	(-).51	(-).48	(-).36		(+).26
Grade 6 reading	(-).54	(-).51	(-).39		(+).22
Grade 6 mathematics	(-).51	(-).48	(-).43		(+).27
Grade 12 reading	(-).51	(-).46	-	(-).29	(+).20
Grade 12 mathematics	(-).51	(-).46	-	(-).34	(+).27
Elementary districts:					
Grade 3 reading	(-).37	(-).38	(-).30	-	(+).23
Grade 6 reading	(-).45	(-).41	(-).34	-	(+).21
Grade 6 mathematics	(-).40	(-).34	(-).28	-	(+).22
High school districts:					
Grade 12 reading	(-).54	(-).55	-	(-).33	(+).36
Grade 12 mathematics	(-).56	(-).57	-	(-).38	(+).31

NOTE: Contingency coefficients may be interpreted as follows:
.00-.29=low; .30-.49=moderate; .50-.69=substantial; .70 and above=high.

Source: California State Testing Program 1970-71, Department of Education, Sacramento, 1972, p.27.

State Test Report Data: Two High School Districts

The California State Testing Program report employs a system of computer printouts to place various district data on a normal curve. By this technique, it is possible to compare districts on a number of variables in addition to test standings. Table 4 is a juxtaposition of data from two high school districts in Santa Clara County, as selected from the 1969-70 publication.[37] In addition to district twelfth grade achievement medians, the twelfth grade verbal ability median is presented.* The four "predictive" variables (poverty, minority, mobility, expenditures) are also shown.

The two districts are similar in many respects, but different in student population. They serve about the same number of pupils and are similar in amount of money expended per pupil. They are also similar in supportive services (non-teaching personnel), teacher salaries and teacher turnover. Both districts are professionally respected and both receive teaching applications many times outnumbering openings. The most readily observable difference between the districts, as judged from the state report, lies in the achievement and ability test data at the top of Table 4. The printouts give a mirror effect: where one is low the other is high. Reading down the other items selected from the state printout, the mirror effect holds true except for the final item (expenditures for instruction per average daily attendance unit), where the districts are approximately the same.

The fact that both districts are generous in their support of education removes the possible question of inequities due to inadequate financial support. The significance of the data in Table 4 to the achievement/environment hypothesis is obvious: the two indices closely related to environment--poverty ranking and minority enrollment--are inversely related to achievement in each of the two districts. The state has identified these as factors related to achievement, and the information from Table 4 is a typical illustration of the theory in operation. The factor of pupil mobility--exceedingly high in the lower achievement district--could also raise questions related to environment and housing as a subject of research.

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* District medians are then ranked and scored by percentile for placement among all twelfth grade scores in the state for that factor. The resulting percentile has no corresponding meaning, therefore, as representing the actual median score of the district. Example: about 80% of the district median scores on publisher's pupil norms on a given achievement test fall between the 40th and 60th percentiles. When these are strung out to show exact ranking in the state, the 40th and 60th percentile scores will fall around the 10th and 90th percentiles respectively. Thus, the state figures are accurate if properly understood, but misleading if perceived as the median score of a district on pupil norms. These cautions apply principally to the achievement and ability test scores, although the effects of redistributing scores bunched around a mode apply equally to the other factors reported.

TABLE 4

SELECTED INFORMATION FROM CALIFORNIA STATE TESTING PROGRAM, 1969-70
FOR TWO SANTA CLARA COUNTY HIGH SCHOOL DISTRICTS

SCHOOL DISTRICT FACTORS	DISTRICT W STATE RANK	DISTRICT W 'Z' SCORE	DISTRICT W DEVIATIONS FROM STATE MEAN (-2 -1 +1 +2)	DISTRICT E STATE RANK	DISTRICT E 'Z' SCORE	DISTRICT E DEVIATIONS FROM STATE MEAN (-2 -1 +1 +2)
ACHIEVEMENT TEST SCORES						
GRADE 12 - READING	76	0.7	XXXX	10	-1.3	XXXX
- LANGUAGE	80	0.8	XXXX	14	-1.1	XXXX
- SPELLING	81	0.9	XXXX	19	-0.9	XXXX
- MATHEMATICS	83	1.0	XXXXX	19	-0.9	XXXX
SCHOLASTIC ABILITY						
GRADE 12	76	0.7	XXXX	21	-0.8	XXXX
MINORITY ENROLLMENT	33	-0.4	XXX	84	1.0	XXXXX
INDEX OF FAMILY POVERTY	20	-0.8	XXXX	69	0.5	XXX
PUPIL MOBILITY						
GRADES 9-12	36	-0.4	XXX	98	2.1	XXXXXXXX
EXPENDITURES - INSTR./ADA	63	0.3	XX	70	0.5	XXX

Intra-District Test Comparisons: Socio-Economic Status/Minority Related to Achievement

Hoffmann has been cited regarding comparison of reading achievement between children in a high-income community and a low-income community in Santa Clara County; he has also cited an intra-district comparison between schools in low income and high income areas. In both cases, low or high income correlated positively with low or high reading ability.

Table 5 (from the California State Testing Program report) presents an intra-district comparison in which both income and minority data may be related to reading achievement. It may be observed that "poverty" is a relative matter as even the lower median household income of $9,591 could not be considered low by many standards; further, the percentage of families below the arbitrary poverty-level definition of $5,000 household income is not greatly different between School A and School B.

The minority populations of the two schools are also probably different in socio-economic status, based upon census data observations that census tracts in the area with high minority populations have lower average incomes than those with low minority populations.

Conclusions from Table 5 are supportive of the hypothesis that low income status and minority memberships are inversely related to educational achievement. In the subsequent section, the achievements of minority pupils in schools and neighborhoods of higher socio-economic levels will be compared with the achievements of similar pupils in neighborhoods on a lower socio-economic level.

Intra-District Test Data Comparison: Mexican-American and Black

It was earlier noted that Coleman cited average verbal and non-verbal (i.e., intelligence) scores of minority pupils (Oriental-Americans excepted) as being consistently lower than average white scores, with the difference increasing between grades one and twelve. Coleman also stated that, when converted to achievement, these average scores represent progressively greater deficiency at higher grade levels. For example, the same relative verbal and non-verbal deficiency at grades 6, 9, and 12 represents grade achievement deficiencies of 1.6, 2.4, and 3.3 years respectively.[38] This finding, combined with the gain in achievement Coleman noted for minority pupils when mixed into schools with pupils from more favorable backgrounds, lends further support to the thesis that neighborhood impaction of poverty-minority housing contributes to adverse educational effects.

To compare Coleman's findings in a local situation, test data were analyzed for two groups of Mexican-American and black twelfth grade pupils in two schools in the same district, as may be seen in Table 6. School C is in a relatively affluent area, with 1970 average household income of approximately $12,800. School D is in an impacted, below average income/high minority area with 1970 average household income of approximately $10,100. (Average county household income was $11,280.) A more important difference may be noted in the percentage of households below the $5,000 poverty level income

TABLE 5

COMPARISON OF TWO SCHOOLS IN A MODERATE INCOME-HIGH MINORITY DISTRICT OF SANTA CLARA COUNTY

October 1972 Sixth Grade Median Scores in Reading, Comprehensive Test of Basic Skills

SCHOOL	Median Reading Grade Equiv.	Ethnic Percent in School 10/71			Ethnic Percent by 1970 Census Tract			1970 Census		
		Black	Spanish Surname	Total	Black	Spanish Surname	Total	Median Hshld. Income	% of Households: Below $5000	Above $25000
School A	6.4	2.3	25.7	28.0	1.3	23.0	24.3	11,964	14.9	4.3
School B	3.8	11.7	63.2	74.9	11.2	52.0	63.2	9,591	17.1	1.7

TABLE 6

COMPARISON OF MENTAL ABILITY AND READING ACHIEVEMENT SCORES MEXICAN-AMERICAN AND BLACK GRADE 12 PUPILS, TWO SCHOOLS IN SAME DISTRICT

	Percent Minority			Test Average, by Percentile, Grade 12			
				Total I.Q.		Reading	
	M-A	Black	Total	M-A	Black	M-A	Black
SCHOOL C[1]	12.0	2.3	14.3	25	29	31	39
SCHOOL D[2]	54.0	14.3	68.3	23	18	26	25

[1] Serves low minority, above-average socio-economic, balanced housing area.

[2] Serves high minority, below-average socio-economic, impacted housing area.

in the two areas: 7.5% in School C and 22.9% in School D. Table 6 indicates that the Mexican-American pupils in School C are of approximately the same tested mental ability as the Mexican-American pupils of School D. The data show, however, a greater difference in reading achievement between the Mexican-American pupils in the two schools than might be expected from the ability prediction. In the case of the black pupils, a greater difference exists between the two schools in ability expectations than was the case with the Mexican-American pupils, and also a greater proportionate difference in reading achievement.

Within the limitations of this investigation, expectations regarding achievement are verified. Findings support the expectation that minority pupils from higher socio-economic neighborhoods who attend a school where they are well outnumbered by white pupils will achieve better than minority pupils in a school where there is not such a mixture.

State Test Report Data: Two Poverty/High Minority Sixth Grades Compared With Two Affluent/Low Minority Sixth Grades

Table 7 shows median percentile scores achieved by sixth grade pupils on the official California achievement tests. Two schools (E and F) from a low income-high minority area are compared with two schools (G and H) from a high income-low minority area. Note that: (1) median household income in the one area is from 2.5 to 2.8 times as much as in the other; (2) the proportions of minority students in the low income area schools are from 17.7 to nearly 40 times the proportions in the higher income areas; and (3) half the children in the low income-high minority schools have test scores below the 17th, 11th and 18th percentiles in reading, language and mathematics respectively, while half the children in the high income-low minority schools range above the 80th, 74th, and 74th percentiles in these areas.

The term "median," while generally a good equivalent to "average," literally means the score of the middle pupil in a group. Thus, although by definition half of the pupil scores must fall below the median, it would be theoretically possible for all of the pupils above median to have extremely high scores.

To give greater definition to the distribution of scores, one may look at the range of scores earned by the middle half of the group; i.e., at the interquartile range, as in Table 8. New information is now apparent: (1) in no case does the top of the middle half (75th percentile) of the lower group fall as high as the bottom of the middle half (25th percentile) of the upper group; (2) 25% of the pupils in the low income schools fall below the third to seventh percentiles; and (3) 25% of the pupils in the high-income schools have scores above the 87th to 93rd percentiles.

The elaboration of test score information in Table 8 tends to support other evidence that the combination of low socio-economic status and high concentrations of minority pupils coincides with low achievement in reading, language and mathematics. The dismal showing of three-quarters of the pupils in Schools E and F, and the virtual failure of one-fourth of them, make Coleman's findings concerning beneficial educational effects of mixing low income minority pupils with economically favored pupils the more relevant. The

TABLE 7

SIXTH GRADE ACHIEVEMENT SCORES FOR TWO SCHOOLS IN LOW INCOME-HIGH MINORITY AREAS AND HIGH INCOME-LOW MINORITY AREAS

SCHOOL	Estimated[1] Median Household Income	Minority Enrollment by 10/71 State Report (percent)			Percentile Score of Median Pupil, Grade 6 State Tests in:		
		Black	Spanish	Total	Reading	Language	Mathematics
E	$ 6049	4.3	73.5	77.8	17	10	18
F	5581	1.3	78.4	79.7	17	11	18
G	15358	0.6	3.8	4.4	82	76	74
H	15708	0.4	1.6	2.0	80	74	74

[1] Median household income is calculated from 1970 Census Tract data. The term "estimate" is used because proportions of tracts within the attendance boundaries had to be estimated. Results, although not precise, are considered to be quite accurate, primarily because the income data in adjacent tracts were always very close. As a consequence, an estimate of 60% in Tract A and 40% in Tract B would not have produced very different results if actual distributions were 58% Tract A and 42% Tract B.

TABLE 8

INTERQUARTILE RANGE (MIDDLE HALF) OF SCORES REPORTED IN TABLE 7

SCHOOL	Percentile Range of Middle Half		
	Reading	Language	Mathematics
E	7-42	3-22	5-27
F	5-33	4-29	6-36
G	66-90	55-89	50-93
H	50-90	49-87	38-91

data suggest that educational support from home and neighborhood is extremely limited in such cases, in contrast to the situation with higher income students, whose homes and neighborhoods are major educational factors.

Summary: Educational Achievement Is Linked to Environment, Socio-Economic Status, Aspirations, and Poverty/Minority Status

This section has focused upon evidence relating achievement--principally in reading--to environmental effects of concentrations of low income/high minority housing. As with the arguments linking lung cancer to cigarette smoking, the evidence must be largely circumstantial, but the circumstances are compelling.

Preschool environment--the home and its surroundings--is vital to earliest learning as well as to later learning. Efforts to "force-feed" deprived children prescriptions for educational readiness, as in Head Start programs, have been generally disappointing. Efforts to "raise" IQ of below-average children show little evidence of lasting effect. Harmful effects of early educational deprivation appear to be virtually permanent. Lasting patterns of potential school success are established through the home and neighborhood.

Socio-economic status is a key factor in achievement--both the status of pupils' homes and the status of entire school districts. This connection is present on local, state, national and even international levels. The differential dropout rate for 16- and 17-year-old black pupils is consistent with low socio-economic status, and such status has a negative effect on aspirations and on the relationship of aspirations to achievement, especially for minority pupils. Socio-economic status is a determinant of achievement as it largely controls the quality of the home and of the neighborhood, including the grouping of homogeneous types of housing.

Evidence presented from official state testing program documents demonstrates the statewide relationship between poverty and achievement and between minority group membership and achievement. These relationships exist locally, as shown by: (1) comparing two high school districts; (2) comparing test results for two schools in different areas of the same elementary school district; and (3) comparing sixth grade achievement in two affluent-low minority schools with achievement in two poor-high minority schools.

The major finding from the Coleman report--that most minority pupils benefit from being mixed in schools of higher socio-economic level--is confirmed in the study comparing twelfth grade minority pupils in two schools of the same district.

In summary, this section has focused upon the theme of this paper: that academic achievement is greatly affected by quality and grouping of housing, with socio-economic status serving as the platform for both.

V. GROWING PROBLEMS IF ZONING AND HOUSING POLICIES ARE NOT CHANGED

Further Ghettoization

Increasing ghettoization of portions of San Jose, East San Jose and some other sections of Santa Clara County has been noted. This is the situation particularly in East San Jose, which contained 72% of the county total of undeveloped minimum lot size zoning as early as 1967. Inasmuch as housing in such areas is of lowest quality and cost, it is a virtual certainty that these homes will be occupied by poor and minority families. Other studies have shown that the poor and the minorities tend to be concentrated in about the same areas,[39] thus intensifying the problems created by poverty or minority status alone.

Increasing Social Pathology and Related Social Service Demands

The increasing ghettoization which results from concentrated zoning and housing patterns creates conditions of social pathology; i.e., health, welfare, juvenile delinquency, and protective service requirements mushroom. Though the individual needs might be handled routinely, the sheer numbers cause severe social problems and the public service response is expensive but inadequate. The situation might be compared to the difference between controlling scattered fires in a large city on a given day and controlling a conflagration started by a number of fires at the same time in a single area. Or perhaps a more realistic comparison would be with the detection and cure of tuberculosis in isolated cases vs. control of an epidemic.

Ghettoization presents special problems for school services in addition to those created by over-representation of underachievers. For example, households in new lower cost areas generally have more and younger children than the norm for all neighborhoods. Extra elementary schools must be built to serve them, but as the families mature, the demand for school decreases. This results in imbalanced and costly educational services.

In areas where enclaves of poor people are populated by "transients" the lack of personal identification with a community precludes action toward improved status. In other areas, a strong sense of "community" may exist, created through several generations of families living in the area. In either case, the lack of opportunities for betterment of conditions frequently leads to describing the areas as blighted.

Santa Clara County Can Benefit From History

San Jose and Santa Clara County are at a developmental stage where the future can be predicted on the basis of present trends but where the course of events may still be altered. The growing economic differences between the poorest and wealthiest areas point to future problems that have already faced and perhaps defeated other metropolitan areas. The lack of appropriate action has created a national urban disaster whose magnitude people are only beginning to perceive.

The growth prospects due to land, climate and opportunity in the Santa Clara Valley offer a laboratory in urban development that can serve as a national model. The major responsibility for positive direction of these forces lies

in the hands of public officials, both elected and appointed. The final section of this paper will indicate some possibilities for positive developments.

VI. ARE THERE SOLUTIONS?

Concentrations of Low Income Housing Must Not Continue

Zoning and housing practices need to be reviewed and stringently amended. Each new approval of a concentrated low cost subdivision condemns the children who live in that area to a lower level of achievement. Ghettoization is a product of intentional, unintentional, and laissez faire attitudes and actions surrounding zoning and housing. Recognition of this central fact is the first step toward solution.

Urbanization Intensifies the Problem

Where communities are large enough for exclusive areas to be built up for the rich, other areas will be somehow set aside for the poor. Due to smaller numbers of people, smaller communities do not face quite the same kind of situation. The proportions of wealthy and poor may be similar to the proportions in a large metropolitan area, but the two groups cannot become as physically isolated in a smaller community. If their children do not attend the same elementary school, they probably rub shoulders in a common high school. This educational mixing in itself may account for the better chance for the poor or minority child outside of an urban area.

No matter how the problem is approached, it is clear that segregation within communities and especially in large urban areas creates cancerous antisocial conditions. The obvious solution, then, is to combat the causes of segregation. But this task is so complex and seemingly impossible that people often attack symptoms instead. Busing of students for racial mix is in some ways such an approach.

Busing Is Not the Answer

Busing has been seized upon as an apparent answer to school segregation, which is itself a product of zoning and housing segregation. The principal reason for promoting busing, almost as a panacea, is that there is no other immediately available way to mix children in schools. The tragedy of busing is that it only attacks the symptoms, not the real problem: zoning and housing practices. The conditions creating the need cannot be so easily halted and then reversed. In tragic fact, many of the authorities who hold such power either do not recognize, or refuse to admit, the deep-seated causes of the problem. The solutions are complex and political rather than as simple and mechanical as busing.

A real hazard in busing is that it carries the seed of failure. It is an artificial means designed to solve only a very small part of the problems of segregation, of which the schools are only one segment. Some of the negative factors in busing are its forced nature, the reluctance of most pupils and many parents to participate in the mechanics involved, and the spotlight of heated controversy usually surrounding it. In addition to

these problems, the theory of busing ultimately calls for inter-district and even inter-state movement of pupils. A number of metropolitan areas are already beyond the point where cross-town busing will change racial mix; and such areas continue to ghettoize. (Consider Richmond, Virginia and Washington, D. C., for example.) For these and other reasons, busing is at best a questionable use of educational resources. As a universal remedy it cannot but fail, and the consequences of failure can be antisocial repercussions against the whole idea of integrated education.

Aggravated Racial Relations Must Be Reduced Through Communication

Not discussed thus far has been the value to an "affluent" child of living in a mixed community and attending a mixed school. The adult who has had no such experience is often half the problem in situations of aggravated racial relations.

There is ample evidence that a major cause of suspicion and hostility between people of different backgrounds--whether they live across a street or across an ocean--is lack of communication. We are at first suspicious and ultimately hostile toward the different or the unknown. The recent friendly exchanges between Americans and Chinese, and Americans and Russians are examples of how people of different backgrounds can quickly erase hostility through overt efforts at friendship and understanding. Although the changed relations may be but temporary, they serve as models for what can be accomplished.

Communication works especially well in changing the attitudes of young people. The writers recently witnessed an exchange of cross-valley visits between black and Mexican-American pupils in a minority area and students in an affluent, all-white area. The minority pupils "couldn't believe" the trepidation of their white visitors, nor were they at ease with the "showcase" feeling caused by their different pigmentation when they returned the visit. On both sides, however, the early hesitancy and embarrassment soon gave way to the natural openness of youth of any color, and both groups learned the surprising lesson that they were more alike than different.

The point to this story is that these potential bigots of all colors were affected by the simple opportunity to become acquainted. Thus, it is not only the poor child in the segregated school who is shortchanged in regard to his education; the affluent child who never has the chance to mix with a cross-section of students is also educationally deprived.

This is not to say that all friction between pupils of different races or classes will automatically disappear by bringing them together. What it says is that bringing them together is an essential step toward living together.

Bicultural and Multicultural Neighborhoods Are a Goal

The emphasis throughout this paper has been on elimination of forces leading to segregation of poverty and minority groups in large enclaves. It is not implied, nor should it be inferred, that the special cultures of minority people should be eliminated. On the contrary, what is to be desired is a bicultural or multicultural neighborhood with the benefits of exposure to other cultures and life styles. Communities of mixed cultures are to be desired as a goal of land use planners.

Incentives May Be An Answer

The need to develop mixed communities is more easily expressed than executed. A primary reason is economic. People must buy homes that are within their means and land values militate against the desirable concept of blending all economic levels of housing in new developments.

The pessimistic approach to the dilemma summarized from Jencks is not shared by the authors of this article. There is, however, cause to examine economic incentives to developers to encourage needed change in the economic mix of new housing. Such incentive will require public understanding and acceptance, political action, and public funding. Continued delay in giving serious review to such alternatives can lead to even more drastic requirements.

Schools Need To Be Re-Examined

Another emphasis of this paper has been on the need to mix poverty-minority children into schools where they are well outnumbered by non-minority pupils who are economically better off. The paper has not yet addressed the need for schools continually to examine their ability to contribute to the special needs of such students. Desegregation and integration are not synonymous terms: desegregation is a necessary first step, but true integration does not automatically follow. Integration can only result from deliberate and well-planned efforts on the part of the school system.

Many schools are very conscious of the special needs of poverty-minority children, and commendable progress marks their efforts. But many schools have not yet responded, possibly because some school officials and school boards do not recognize the fact that, though few in number, poverty minority children have special needs. Whatever the cause, there is no logical reason for the issues of school responsibility to be avoided.

Special needs may be assessed by such means as community and student surveys and by examining different points of view. A relevant and current collection of information on Indian, Mexican-American, and black children, much of it by minority ethnic groups, is to be found in Beyond "Compensatory" Education, previously cited (Ref. 23). These readings are especially pertinent, as they emphasize curriculum suggestions for poverty-minority pupils. They also deal with the problem of obtaining valid assessments of the learning status and potential of minority children.

Needed: A County-Wide Policy Body with Enforcement Powers

There are too many local housing jurisdictions in Santa Clara County and too few enforceable common goals. A positive sign, however, is the fact that all fifteen incorporated cities and the county have joined in a Joint Cities-County Housing Element Program, of which the 1973 Housing Element draft is a product. Common goals are stated, albeit "focused to a high degree on short-range problems and objectives."[40] (The statement continues: "This approach is necessitated by the extremely dynamic nature of housing and the housing market.") No enforcement power exists to implement the plan, and the working arrangement is primarily dictated by the federal mandate for housing elements as a requirement and prerequisite

for funding under certain grant-in-aid programs. Despite the looseness of the confederation, it is a positive step toward needed cooperation. In the 1973 draft, three recommendations are repeated from the Joint Housing Element, 1971 report:

> "...that all local jurisdictions adopt the following policies to discourage concentration and promote a more desirable level of income diversity:
>
> "a. The use of zoning in ways which exclude persons on the basis of racial, economic, ethnic, or age characteristics is unacceptable in the cities and unincorporated areas of Santa Clara County;
>
> "b. Zoning is to be used in ways which will encourage variety and mix in housing types and provide adequate sites for housing persons of all income levels in each jurisdiction, and generally in proportion to the array of income levels provided by employment opportunities in each jurisdiction;
>
> "c. It should be the policy of each municipality to encourage a mix in the type and cost of housing units in new subdivisions and apartment complexes as a prerequisite to the granting of planned unit developments."[41]

These recommendations, although two years old, have not yet been unanimously adopted by the constituent jurisdictions.

School Superintendents Organize for Better Representation in Planning

Twenty-six of the 33 school districts (exclusive of community college districts) in Santa Clara County fall partly or completely within the boundaries of the City of San Jose. Recognizing their need to speak from a common and politically unified point of view, those districts in 1971 formed the Inter-District Planning Council (IDPC).

IDPC has, in addition to making other studies, adopted policy positions on low-income housing. In summary, these positions are:

1. Supply

   1.1 Expand supply of housing for low and moderate income families, improving or eliminating and replacing inadequate housing;

   1.2 Intersperse low and moderate income housing among the total community, not in massive developments that are racially, ethnically, and economically homogeneous;

   1.3 Avoid concentrating low and moderate income housing in any school district, but intersperse throughout the community;

   1.4 Maintain complete and current information on present and anticipated supply and demand for low and moderate income housing.

2. Choice

2.1 Fair housing legislation affecting county and metropolitan areas should be adopted and enforced;

2.2 Schools should play an active part in educating public to need for policies under 2.1 above.

3. Community Development

3.1 Zoning, housing and subdivision laws and regulations should be continually revised to be kept workable and to further the goal of heterogeneous communities;

3.2 Neighborhood organizations should be encouraged to participate actively in community planning.

4. Political Action

4.1 The superintendents shall establish the IDPC for the purpose of planning and coordinating school facilities, and for relating interests of the school districts to planning agencies, other government bodies and private groups;

4.2 The IDPC will express the position of the superintendents of the cooperating districts on current public issues, including those related to development of low and moderate income housing, at appropriate public hearings and meetings.

Cooperation Between City and Schools

One of the requisites to better zoning practices is cooperation between policy agencies and the schools, and some progress has been made in this direction in Santa Clara County.

The City of Morgan Hill has adopted statements endorsing economic and racial mix in new housing developments. It has also adopted a provision for cooperative involvement of the school district in requiring developers to set aside appropriate acreage to meet expected school demand. According to the superintendent of the Morgan Hill Unified School District, both provisions have worked well for several years in practice.

Soon after the formation of the Inter-District Planning Council, the City of San Jose developed a cooperative application procedure for new developments. Under this plan, developers must, as an automatic condition of a building application, secure school district clearance regarding availability of school space. Where space is not so certified, the builder is obligated to meet conditions up to and including provision of school housing.

Such a policy is a substantial step toward insuring better educational opportunity, both in space and in socio-economic mix. Such policies, if universal, could help ease the threat of increasing ghettoization and unequal educational opportunity, so far as new developers would be involved. If, however, a mixed pattern of policies is allowed to develop, where in

some cases stringent guidelines are set and in other cases no guidelines, the success of one area will create worsening problems for its neighbors. The ultimate effect of inconsistent policies will be generally bad for all areas.

VII. RECAPITULATION

The purpose of this paper has been to focus attention upon the critical importance of zoning and housing to education. The three major sections cover: (1) the causes of undesirable housing patterns; (2) their apparent effects upon educational achievement; and (3) some possibilities for positive action to reverse the negative effects.

There are three major conclusions:

1. Government essentially controls where a learner lives and must attend school. This is the result of zoning and building practices that create and sustain enclaves of affluence and other enclaves of the poor and the minorities. As a consequence, the children of these two extreme groups, the affluent and the poor, tend to be concentrated in schools where they become the norm, to their educational disadvantage.

2. There is a direct reflection of the quality of the home upon the educational achievement of children. Home quality is a combination of factors including the socio-economic and educational level of the parents, the quality of surrounding homes, and the neighborhood environment, with the socio-economic factor being the best single predictor of educational achievement.

3. We should treat causes, not symptoms. Efforts should be directed toward mixing pupils in schools with a full spectrum of socio-economic and ethnic characteristics. Busing is an expedient measure directed at a symptom; it is ultimately impractical and potentially a hazard unless its limitations are clearly understood.

In Santa Clara County, positive steps have been taken involving cooperation between planning agencies and school districts, and efforts undertaken are operating successfully. Educational leaders have taken an unusual political stand involving the responsibility of schools to fight for the educational rights of their future pupils. These kinds of actions indicate essential enlightenment.

Perhaps the major problem in getting at the causes of segregation is to develop an understanding of their complexity. Until this is achieved by politicians, school boards and superintendents, other officials, and the public alike, the country will probably not be ready for the drastic remedies required. The writers are not proposing remedies, but believe that their development and application is a matter of urgency and that our country already faces a national urban disaster.

The ultimate responsibility for action lies with elected officials. When the problems of segregation and their poisonous effect in society are fully recognized, the nation will be ready to pay the price to solve them. At

that point, elected officials will have a clear mandate. If elected officials would take the lead--would recognize and act upon the situation without waiting for the disaster to develop further--untold cost in human misery and public resources would be spared.

POSTSCRIPT

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ABAG REPORT

4.7 Million People Forecast In County

By ELLIAS CASTILLO
Staff Writer

An Association of Bay Area Governments report has warned Santa Clara County could be faced with a whopping 4.7 million population that would strain utilities, services and create unchecked urban sprawl within 17 years.

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